REMARKS/ARGUMENTS

Claims 7, 9 and 13 are pending. Claims 7, 9 and 13 have been rejected.

THE §102(b)/§103(a) REJECTION

Claims 7, 9 and 13 have been rejected under 35 U.S.C. §102(b) and under §103(b) as being anticipated or rendered obvious by U.S. Patent No. 4,092,286, Noll et al., (herein, Noll).

The Office Action contends that Noll describes the diamine and water extension to form a polyurethane dispersion and the solids content and particle size of the dispersion as claimed in Claim 7 of the present invention. The Office Action goes on to state, "[t]he choice of anionic emulsifiers from the ionic emulsifiers from the ionic emulsifiers of column 11, lines 43-45 is not so great as to remove Noll as an anticipating reference as they are the most commonly used emulsifiers..." In the obvious rejection, the same sentence regarding anionic emulsifiers is presented along with, "[i]t would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed emulsifiers because they are shown by Blake to be useful in polyurethane emulsions..." Applicants presume that Blake refers to U.S. Patent No. 4,507,426, which is present on the Notice of References Cited.

Applicants respectfully disagree and respond as follows. Noll is directed to improved self-emulsifying polyurethane dispersions. (col. 1, lines 14-23, lines 45-61). The Noll polyurethane dispersions improve over the prior art internally stabilized polyurethane dispersions by incorporating both non-ionic and ionomer centers in the polyurethane instead of just one type of hydrophilic center (i.e., incorporate two types of internal surfactants). (col. 1, lines 57-68). The particular internal surfactant moieties of Noll are described at col. lines 48-57.

The Office Action, to reiterate, states that "the choice of an anionic surfactant from the ionic emulsifiers [of Noll] is not so great as to remove Noll as an

anticipating reference." Noll, however, specifically teaches that the polyurethane must have internal surfactants as described above and that the polyurethanes that are formed are self-dispersible. Noll only describes that the use of external surfactants, preferably ionic emulsifiers, "is also possible, but, of course, not essential." Thus, Noll describes that the external surfactant is not necessary to form the dispersion. Noll also describes that when the amount of the internal surfactant decreases to a low level, the average particle size increases to 5 to 50 micrometers in diameter. (col. 11, lines 13-19).

Claim 7 of the present invention requires that the "polyurethane latex [has] a mean volume average particle size of not greater than about 1 micron . . . wherein the latex is stabilized by a surfactant consisting essentially of an external anionic surfactant." Thus, the invention as claimed in Claim 7 requires an external anionic surfactant essentially in the absence of any other surfactant including internal surfactants. Consequently, as a whole, Noll not only does not anticipate the present invention (i.e., Noll requires an internal surfactant), but teaches away from the present invention in that Noll requires an internal surfactant and teaches that as the internal surfactant decreases (i.e., approaches zero), the average particles size of the dispersion increases substantially to much greater than 1 micrometer in diameter. For this reason, Claim 7 and Claims dependent therefrom are novel and non-obvious, regardless of what Blake may or may not describe.

Considering the foregoing reason, Claims 7, 9 and 13 are patentable. Applicants, therefore, respectfully request withdrawal of all rejections and allowance of Claims 7, 9 and 13.

Respectfully submitted,

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